**Mission Bay Landfill**
**Technical Advisory Committee**
**City Administration Building**
**12th Floor Conference Room B**
**May 20, 2005**
**10:00am to 12:00pm**

**Meeting Minutes**

TAC Members Present

| | | |
|---|---|---|
| Donna Frye | David Kennedy, DDS | Judy Swink |
| Barry Pulver | Brian McDaniel | |

TAC Members Absent

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|---|---|---|
| Bruce Reznik | Robert Tukey Ph.D. | Ben Leaf |
| John Wilks | Robert Curtis | Frank Gormlie |
| Dave Huntley Ph.D. | Rebecca Lafreniere | Jeoffry Gordon, MD |

Interested Parties/Alternates

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|---|---|---|
| Scott Andrews | Kathleen Blavatt | Bob Gutzler |
| Susan Orlofsky | George Murphy | Patrick Owen |
| Samir Mahmalji | Hiram Sarabia | |

Staff

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| Steven Fontana | Ray Purtee | Sylvia Castillo |
| Chris Gonaver | John Lamb | |

The meeting was called to order by Councilmember Frye. Self introductions were made. A quorum was present.

**Approval of Minutes**

April meeting minutes were reviewed and approved with no changes.

**Status of Assessment Reports**

Bob Gutzler reported that work was continuing on the site assessment and we should see the report by the June TAC meeting.

**UCSD Feral Dogs Report**

Natalie Jeremijenko of UCSD spoke on her work and the "release of the dogs" at the Mission Bay landfill approximately 5 weeks ago. She plans to tell the group how we may bring public attention and perhaps public remediation to the Mission Bay landfill.

What do kids learn from interactive toys like robotic dogs? Do they learn to interact? What more could be learned and could the toys be more productive? There are about 20 different brands of toy robotic dogs on the market and they are the cheapest "robots" available. She instructs a class where toy dogs are "hot rodded" by her students with upgrades to their mobility (by using truck chassis), sensing (adding toxic sensors), and brains (microprocessor). After upgrading, the dogs can sense volatile organic compounds and move in the direction where the concentration is highest. The students' final test is to release their dogs at a site with contamination to see how they perform. The movement of the dog is easily understood by everyone and doesn't require review of technical lab data to determine where the hotspots are. The general public can understand the results of such an investigation.

So how successful was the release of the dogs at Mission Bay landfill? The dogs found nothing- they did not move together to any one common spot. But this was not a failure- it simply meant that what was sensed by the dogs was not distinguishable from sources other than the landfill. The sensors were cheap and not very sensitive. Mechanically the dogs worked well- their mobility was good. Certainly the event was a media success, especially as the students were asked by the media what did the results mean, thus giving the students instant responsibility for their work as they crafted a reply. Overall the event was a success as it introduced the students to the complexity of an urban ecosystem where there may be many contaminants and as many sources.

This class is held every year and she proposes that we stage an annual dog day release? And perhaps have competing teams of students, including high school teams?

Another project concerning public interaction and remediation was the planting of cloned trees in the San Francisco bay area. These trees were black walnut crossed with English walnut. Since they started out as nearly identical saplings, would changes in their growth reflect contamination in the environment? Comparing the growth of trees is something easily done by the general public. And with a tree you could be monitoring a site for the life of the tree- 40, 60, or 80+ years. This is much longer than the usual monitoring done at a site which averages six years.

Another project showed people wearing breathing filter masks with the words "clear skies?" to show that perhaps words are failing in the efforts to clean our air. Also, the masks had an optical grey scale to show the amount of grime collected on them, thus reflecting what the lungs would have collected if the mask wasn't worn. This is another example of lay people collecting pollution data.

Layers of publicly observed data such as the above could be plotted on natural systems maps; she would welcome any data on the Mission Bay landfill that's already mapped as she hopes to publish a map of the site.

The intent here is to foster discussion between expert and lay communities on environmental pollution. She proposes some strategies for public involvement on this site- perhaps the most visible polluted site in the nation- and public remediation. Why not interact with this highly

impacted urban site and share resources? For example, establish a fish restaurant- where humans feed fish. Or have a park bench that allows the sitter to observe what is going on below the water level thru the use of a polycarbonate observation bubble mounted in front of the bench. Another example of an interface project is to imagine a group of neutrally buoyant posts floating upright in the water. At the top, they have a light. Under the water, they have a hole thru which fish could swim. Every time a fish swims thru the hole, a sensor causes the light to flash. The presence of fish would be made known to humans with visual signals. Think of an "open" Sea World; why should there be concrete walls between Sea World and the bay?

The site assessment report recommendations could include a public education component, which could include public interaction and remediation. The Mission Bay landfill site provides tremendous opportunity to turn environmental concern into environmental reconstruction.

A web site describing more of her work is http://www.worldchanging.com/archives/001450.html

The web site for the feral dogs release is http://xdesign.ucsd.edu/feralrobots/

**Public Comment**

Hiram Sarabia of San Diego Baykeeper spoke of their programs for children concerning environmental interaction, specifically Project SWELL, which could benefit from an exchange of ideas with Natalie and UCSD.

As a possible remediation measure for the landfill, a suggestion was made to consider using plants whose roots draw toxins up out of the soil. Getting students involved in the planting would be another positive environmental interaction.

Steve Fontana let the group know that the Park and Recreation department will be cleaning out some de-silting basins that have filled up with silt in the South Shores park area.

In reference to ESD's recent letter to the RWQCB requesting that the site's storm water management permit be changed, an objection was raised to removing NPDES monitoring requirements for the site. Brian McDaniel stated that the RWQCB is considering removing many sites from the industrial NPDES program. It was agreed that this topic would be an agenda item at the next TAC meeting.

Voting members of the TAC were asked that if they cannot attend a meeting to please let the City know (JArmstrong@sandiego.gov), so we can help assure a quorum.

**Items for next agenda**

• Mission Bay Landfill Storm Water Management
• Status of Assessment Report by SCS

**Future Meetings**

City Administration Building, 12th Floor Conference Room B, 10:00am – 12:00pm

- Friday, June 17, 2005
- Friday, July 1, 2005
- Friday, August 5, 2005 (to be discussed)